

SEQUENCE LISTING

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Olson, Eric

5

<120> A MODEL SYSTEM FOR DRUG DELIVERY

<130> PR.3021.001 60/105,965 DRUG DISCOVERY

10 <140> 60/105,965
 <141> 1998-10-28

<160> 14

15 <170> PatentIn Ver. 2.0

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Glu Thr

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Leu Pro Val Ser Leu Glu Asp Glu Met Arg Lys Ser Tyr Leu
Asp Thr

10 20 25 30

Ala Met Ser Val Ile Val Arg Arg Ala Leu Pro Asp Val Arg
Asp Gly

15 35 40 45

Leu Lys Pro Val His Arg Arg Val Leu Tyr Ala Met His Glu
Leu Lys

50 55 60

20 Asn Asn Trp Asn Ala Ala Tyr Lys Lys Ser Ala Arg Ile Val
Gly Asp

65 70 75
80

25 Val Ile Gly Lys Tyr His Pro His Gly Asp Ser Ala Val Tyr
Asp Thr

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95

30 Ile Val Arg Met Ala Gln Asn Phe Ala Met Arg Tyr Val Leu
Ile Asp

100 105 110

09719867-122800

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Gly Gln Gly Asn Phe Gly Ser Val Asp Gly Leu Ala Ala Ala
Ala Met
115 120 125
5
Arg Tyr Thr Glu Ile Arg Met Ala Lys Ile Ser His Glu Met
Leu Ala
130 135 140
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160
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Glu His Glu Pro Leu Val Leu Pro Thr Arg Phe Pro Thr
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Gln Gly
20 25 30

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Figure 1. The structure of the proposed model. The model is composed of three layers: input, hidden, and output. The input layer consists of 10 nodes, the hidden layer consists of 10 nodes, and the output layer consists of 10 nodes. The model is trained using a genetic algorithm (GA) to optimize the weights and biases of the network. The GA is applied to the hidden layer weights and biases, while the input and output layer weights and biases are fixed. The fitness function is defined as the mean squared error (MSE) of the network. The GA iterates until the fitness function reaches a minimum value. The final model is then used to predict the output of the network for a given input.

| | | |
|-----|-----|-----|
| 145 | 150 | 155 |
| 160 | | |

Gly Met Ala Lys Ala Ser Leu Glu Ala Gly Ile Arg Phe Thr
Ala Ala

175 165 170

Cys Leu Gly Lys Glu Gly Ile Arg Cys Asn Gly Ile Ser Ala
Gly Pro

180 185 190

Ile Lys Thr Leu Ala Ala Ser Gly Ile Ala Asp Phe Gly Lys
Leu Leu

195 200 205

Gly His Val Ala Ala His Asn Pro Leu Arg Arg Asn Val Thr
Ile Glu

210 215 220

Glu Val Gly Asn Thr Ala Ala Phe Leu Leu Ser Asp Leu Ser
Ser Gly

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Asn Ala

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Leu Ser Thr Glu Gly

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